

10. Pileus infundibuliform, bay-red; spores 6-8  $\mu$ . *L. rufus* Fr.  
 Pileus plane or subdepressed, golden brown; spores 8-10  $\mu$ . 11.
11. Pileus smooth, soon glabrate. *L. volemus* Fr.  
 Pileus rugose-reticulate, especially on the margin. *L. volemus subrugosus* Pk.
12. Pileus rugose-reticulate, dark chestnut; spores 10-12  $\mu$ . *L. corrugis* Pk.  
 Pileus smooth, not rugose-reticulate. 13.
13. Stipe concolorous. 14.  
 Stipe of a different color from the pileus. 15.
14. Pileus and stipe grayish-white, small, 1-4 cm. *L. griseus* Pk.  
 Pileus and stipe reddish-allutaceous, larger, 8-15 cm. *L. aquifluus* Pk.
15. Pileus grayish-brown, often violet-tinted, 2.5-8 cm.; stipe pallid, pubescent.  
 hollow or stuffed. *L. glycosmus* Fr.  
 Pileus olivaceous, 2.5 cm.; stipe white, solid. *L. alpinus* Pk.
16. Stipe white; pileus brown; milk none [*Russula* ?]. *L. illachrymans* B. & Rav.  
 Stipe concolorous or subconcolorous. 17.
17. Flesh white, changing to brownish flesh-color. *L. fumosus* Pk.  
 Flesh not changing color. 18.
18. Stipe with white strigose hairs at base. *L. paludinella* Pk.  
 Stipe glabrous or subpruinose. 19.
19. Pileus golden or golden brown; stipe orange. *L. mitissimus* Fr.  
 Pileus some shade of reddish-brown or chestnut. 20.
20. Milk scanty, color of watered silk; stipe solid. *L. serifluus* (DC.) Fr.  
 Milk white, not watery. 21.
21. Pileus hygrophanous, zonate when moist, azonate when dry, 5-10 cm. *L. mutabilis* Pk.  
 Pileus not hygrophanous. 22.
22. Pileus subzonate, aromatic, especially on drying. *L. camphorarius* (Bull.) Fr.  
 Pileus azonate, not aromatic. 23.
23. Pileus reddish-brown, margin even; stipe subpruinose. *L. subdulcis* (Bull.) Fr.  
 Pileus bay-red, shining, margin inflexed, crenulate. *L. subdulcis badius* Gillet  
 Pileus cinnamon-red, somewhat shining. *L. subdulcis cinnamomeus* Gillet  
 Pileus dull chestnut-red. *L. subdulcis rutus* Gillet

NEW YORK BOTANICAL GARDEN.

## SOME NEW MEXICO PLANTS

BY T. D. A. COCKERELL

### *Astragalus simulans* sp. nov.

Similar to *A. mollissimus* in general appearance and manner of growth. Leaves about 150 cm. long, pinnate, with 8-13 pairs of oval leaflets, about 14 mm. long and 8 broad, silvery on both

sides with long appressed white hairs. Flowers about 15-18 in a head about 50 mm. long, on pedicels about 2.5 mm. long, with hairy linear bracts about 7 mm.; flower about 17 mm. long and only 5 broad; calyx hairy, its tube about 8 mm. with five linear lobes about 5 mm. Standard narrow, the sides folded upwards, the expanded portions all deep magenta, the hidden whitish. Wings long and narrow, surpassing keel by nearly 3 mm., magenta, with the terminal portion broadly white. Keel pale magenta with the margin whitish, apex deeply emarginate. One free stamen. Peduncles densely white-hairy, the pubescence sub-appressed and interwoven. Pod oblong, thick, pointed, about 20 mm. long, 6.5 broad, 5 high, curved upwards, sulcate (not very deeply) only on dorsal side, more or less speckled with red, sometimes so much as to appear red except basally, quite glabrous, 2-celled by the intrusion of the dorsal suture, which touches but does not unite with the ventral. Pods on pedicels about 3 mm. long.

Stony hills at Las Vegas, New Mexico, growing in clumps, May 18, 1901 (*T. D. A.* and *W. P. Cockerell*). The fruiting stems become at length depressed and buried in the soil. At the same place grow *Astragalus accumbens* Sheld. and *Potentilla subviscosa* Greene, these kindly identified for me by Dr. Rydberg. The type of *A. simulans* is in herb. N. Y. Botanical Garden.

#### ***Aragallus pinetorum* Vaganus var. nov.**

Similar to *A. pinetorum* Heller (1899), but only 1.5-1.75 dm. high, and the flowers white, the keel with a pair of large purple blotches within, showing through to the outside; middle of standard with a pair of faint purple patches.

Heller's larger plant, with white unspotted flowers, occurs at a much lower altitude, in the pine region. *A. pinetorum Vaganus* was very abundant in one locality only, an exposed treeless limestone outcrop on the top of the Las Vegas Range, above the Sappello Canyon at about 11,000 feet. It was discovered on June 26, 1901, by Mr. Fabian Garcia, and on the following day I spent some time on the spot studying the plants. The flowers were observed to be visited by *Bombus* and by *Pyraucis cardui*, while the beetle *Cantharis Nuttallii* was feeding on the leaves. The type of *A. p. Vaganus* is in the herb. N. Y. Botanical Garden; I am indebted to Dr. Rydberg for the recognition of its relationship with *A. pinetorum* of Heller.

The following plants also were collected on the top of the Las Vegas Range (11,000 feet), and have been determined by Dr. Rydberg: *Ranunculus micropetalus* (Greene) Rydb.; *Draba streptocarpa*, A. Gray, alpine form; *Anemone globosa* Nutt.; *Saxifraga austromontana* Wiegand; *Androsace pinetorum* Greene; *Polemonium delicatum* Rydb., unusually large; *Antennaria aprica* Greene. Most of them, at least, must be new to the flora of New Mexico.

PAROSELA JAMESII (T. & G.) Vail.—Coulter, in the Botany of Western Texas, says of this species: "flowers purple with a yellowish standard." In the Wheeler Survey Botany the petals are said to be yellowish or rose-color, scarcely exceeding the calyx. As a matter of fact, the flowers are entirely bright canary-yellow, turning ferruginous as they fade. The keel much exceeds the calyx. The plant is very common at Las Vegas, N. M., flowering early in June. Las Vegas specimens have been carefully compared with the type of *P. Jamesii* by Miss A. M. Vail, and she writes me that there is no difference whatever; "the type has yellow flowers, some of the petals of which have faded into a brown or reddish." Perhaps the publication of this note may prevent some one from publishing *P. Jamesii* as a new species, misled by the descriptions.

✓ EAST LAS VEGAS, N. M.

## A VISIT TO OKEFINOKEE SWAMP IN SOUTHERN GEORGIA

BY ROLAND M. HARPER

(Extracted from a Letter to Dr. John K. Small.)

I suppose you received my card from Folkston? The afternoon of the next day Mr. Ricker and I entered the great Okefinokee, with a boat and a guide. We spent forty-five hours in the swamp, and to say that I was surprised and delighted is putting it mildly. It is certainly very different from what I expected. There is no danger or difficulty about it at all. We went in on the canal about eleven miles, which took us nearly to the middle of the swamp.